

CLAIMS

1. A method for communicating vendor-specific data between devices, comprising:

transmitting a vendor-specific communication having vendor-specific cyclic
5 redundancy check (CRC) data from a first device to a second device, wherein the first
device and the second device are associated with a common vendor;
recognizing the vendor-specific CRC data at the second device; and
processing the vendor-specific communication at the second device.

10 2. A method for communicating vendor-specific data between devices as
recited in claim 1, wherein the vendor-specific CRC data is generated using a vendor-
specific CRC data generation method.

3. A method for communicating vendor-specific data between devices as
15 recited in claim 2, wherein the vendor-specific CRC data generation method includes use
of a vendor-specific seed value in conjunction with a standard CRC data generation
method.

4. A method for communicating vendor-specific data between devices as
20 recited in claim 2, wherein the vendor-specific CRC data generation method includes use
of a vendor-specific CRC data generation formula.

5. A method for communicating vendor-specific data between devices as
recited in claim 1, wherein the vendor-specific communication conforms to a frame
25 structure of a standard protocol.

6. A method for communicating vendor-specific data between devices as recited in claim 1, wherein transmitting the vendor-specific communication is performed in accordance with a standard protocol.

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7. A method for communicating vendor-specific data between devices as recited in claim 1, wherein recognizing the vendor-specific CRC data at the second device includes performing a vendor-specific CRC data check and obtaining a result from the vendor-specific CRC data check indicating that the vendor-specific CRC data is valid.

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8. A method for communicating vendor-specific data between devices as recited in claim 7, wherein processing the vendor-specific communication at the second device includes processing the vendor-specific communication in accordance with a vendor-specific protocol.

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9. A method for communicating vendor-specific data between devices as recited in claim 1, wherein the first device is a first initiator device and the second device is one of a second initiator device and a target device.

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10. A method for performing vendor-specific device communication, comprising:

generating a communication including vendor-specific data and vendor-specific cyclic redundancy check (CRC) data;

transmitting the communication from a first device to a second device;

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performing a CRC check at the second device;

recognizing the vendor-specific CRC data as having been generated using a vendor-specific CRC data generation method; and
processing the communication in accordance with a vendor-specific protocol.

5 11. A method for performing vendor-specific device communication as recited in claim 10, wherein the CRC check is performed using a vendor-specific CRC checker.

12. A method for performing vendor-specific device communication as recited in claim 11, further comprising:

10 recognizing the vendor-specific CRC data as being invalid as a result of performing the CRC check using the vendor-specific CRC checker; and
processing the communication in accordance with a standard protocol.

13. A method for performing vendor-specific device communication as recited in claim 12, wherein processing the communication in accordance with the standard protocol includes sending a negative acknowledge (NAK) response from the second device to the first device.

14. A method for performing vendor-specific device communication as recited in claim 10, wherein the vendor-specific CRC data is generated using one of a vendor-specific seed value in conjunction with a standard CRC data generation method and a vendor-specific CRC data generator polynomial.

15. A method for performing vendor-specific device communication as recited in claim 10, wherein transmitting the communication from the first device to the second device is performed using a standard protocol.

5 16. A method for performing vendor-specific device communication as recited in claim 10, wherein the vendor-specific CRC data indicates a type of vendor-specific data included in the communication.

17. A method for operating a device, comprising:

10 (a) receiving a communication including cyclic redundancy check (CRC) data;

 (b) performing a vendor-specific CRC data check;

 (c) identifying the CRC data as representing valid vendor-specific CRC data, the valid vendor-specific CRC data indicating inclusion of vendor-specific data within the
15 communication;

 (d) processing the communication in accordance with a vendor-specific protocol in response to identifying the CRC data as representing valid vendor-specific CRC data;

 (e) performing a standard CRC data check;

20 (f) identifying the CRC data as representing valid standard CRC data;

 (g) processing the communication in accordance with a standard protocol in response to identifying the CRC data as representing valid standard CRC data;

 (h) identifying the CRC data as being invalid, the invalid CRC data representing other than one of valid vendor-specific CRC data and valid standard CRC
25 data; and

(i) processing the communication in accordance with the standard protocol in response to identifying the CRC data as being invalid.

18. A method for operating a device as recited in claim 17, wherein elements
5 (b) through (d) are performed prior to elements (e) through (g).

19. A method for operating a device as recited in claim 17, wherein elements
(b) through (d) are performed in a substantially parallel manner with elements (e) through
(g).

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20. A method for operating a device as recited in claim 17, wherein receiving
the communication is performed in accordance with a standard protocol.

21. A method for operating a device as recited in claim 17, wherein the valid
15 vendor-specific CRC data is generated using one of a vendor-specific seed in conjunction
with a standard CRC data generator and a vendor-specific CRC data generator.

22. A method for operating a device as recited in claim 17, wherein the valid
vendor-specific CRC data represents a type of vendor-specific data contained within the
20 communication.

23. A device having vendor-specific communication capability, comprising:
a first set of circuitry configured to receive a communication from an initiator
device, the communication including cyclic redundancy check (CRC) data;

a second set of circuitry configured to perform a vendor-specific CRC data check, the second set of circuitry being capable of identifying the CRC data as representing valid vendor-specific CRC data, the valid vendor-specific CRC data indicating inclusion of vendor-specific data within the communication; and

5 a third set of circuitry configured to process the communication in accordance with a vendor-specific protocol.

24. A device having vendor-specific communication capability as recited in claim 23, further comprising:

10 a fourth set of circuitry configured to perform a standard CRC data check, the fourth set of circuitry being capable of identifying the CRC data as representing valid standard CRC data, the valid standard CRC data indicating conformance of the communication to a standard protocol; and

 a fifth set of circuitry configured to process the communication in accordance with
15 the standard protocol.

25. A device having vendor-specific communication capability as recited in claim 24, further comprising:

 a sixth set of circuitry configured to identify the CRC data as being invalid, the
20 invalid CRC data representing other than one of valid vendor-specific CRC data and valid standard CRC data; and

 a seventh set of circuitry configured to process the communication in accordance with the standard protocol in response to identifying the CRC data as being invalid.